

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET S.W.
ATLANTA, GEORGIA 30303-8960

OCT 13 2000

4WD-RCRA

ORIGINATORS COPY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Don Williams Grenada Manufacturing 635 Highway 332 Grenada, MS 38901

SUBJ: RCRA Compliance Evaluation Inspection (CEI)

Grenada Manufacturing

EPA Id. Number: MSD 007 037 278

Dear Mr. Williams:

On July 17, 2000, the U.S. Environmental Protection Agency (EPA), along with the Mississippi Department of Environmental Quality (MDEQ), conducted a Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI) at the Grenada Manufacturing, in Grenada, MS, in order to determine its compliance status with RCRA.

Enclosed is the EPA RCRA CEI report which indicates that a violation of RCRA was discovered. A copy of this report has also been forwarded to MDEQ. Pursuant to the EPA - MDEQ Memorandum of Agreement, MDEQ is the lead agency for any potential enforcement action which may result from the RCRA violation cited in the report.

If you have any questions regarding the inspection, please contact Parvez Mallick, of my staff, by phone at (404) 562-8594 or by e-mail at mallick.parvez@epa.gov.

I M

Jeffrey T. Pallas, Chief

South Enforcement and Compliance Section RCRA Enforcement and Compliance Branch

Enclosure

cc: Mr. Don Watts, MDEQ w/enclosure

ENVIRONMENTAL PROTECTOR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET S.W. ATLANTA, GEORGIA 30303-8960

OCT 13 2000

4WD-RCRA

Mr. Don Watts, Chief
Mississippi Department of Environmental Quality
Environmental Compliance & Enforcement Division
Office of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39289

SUBJ: RCRA Compliance Evaluation Inspection (CEI)
Grenada Manufacturing

Dear Mr. Watts:

On July 17, 2000, a Compliance Evaluation Inspection (CEI) was conducted by the United States Environmental Protection Agency (EPA) and Mississippi Department of Environmental Quality (MDEQ) at Grenada Manufacturing, in Grenada, MS, to determine the facility's compliance status with RCRA.

Enclosed is the EPA RCRA CEI report which indicates a violation of RCRA was discovered. Pursuant to the EPA - MDEQ Memorandum of Agreement, MDEQ is the lead agency for enforcement of violation discovered during this inspection.

Pursuant to the Enforcement Response Policy (ERP), Day 0 is the date of the inspection referenced above. Based upon the violation discovered during the referenced inspection, the facility is determined to be a Significant Violator (SV). Therefore, MDEQ must issue an informal enforcement action to the facility within ninety (90) days from day 0, and facility must return to compliance within ninety (90) days from receipt of that informal action.

If you have any questions regarding the inspection, please contact Parvez Mallick, of my staff, by phone at (404) 562-8594 or by e-mail at mallick.parvez@epa.gov.

Agrica

Sincerely yours

Jeffrey T. Pallas, Chief South Enforcement and Compliance Section

RCRA Enforcement and Compliance Branch

Enclosure

RCRA Inspection Report

1) <u>Inspector and Author of Report</u>

Parvez A. Mallick Environmental Engineer

2) <u>Facility Information</u>

Grenada Manufacturing 635 Highway 332 Grenada, MS 38901 EPA Id. Number: MSD 007 037 278

3) Responsible Officials

Don Williams, Plant Environmental Coordinator

4) <u>Inspection Participants</u>

Don Williams, Grenada Manufacturing Kirk Shelton, MDEQ Parvez A. Mallick, USEPA Region 4

5) <u>Date of Inspection</u>

July 17, 2000

6) Applicable Regulations

Title 40 Code of Federal Regulations (CFR) Parts 260 through 270, 273, and 279.

Mississippi Hazardous Waste Management Regulations (MHWMR) Part 260 through 279. The State of Mississippi adopts by reference the regulations in 40 C.F.R. Part 260 through 279.

7) Purpose of Inspection

To conduct an unannounced EPA oversight Compliance Evaluation Inspection (CEI) and determine facility compliance with applicable MHWMR requirements.

8) Facility Description

Grenada Manufacturing ("the facility"), formerly known as Textron Automotive Company (a.k.a Randall-Textron), is located at 635 Highway 332 on the north side of Grenada, Mississippi. The facility was originally built in 1960 by Lyons, Incorporated, and sold to North American Rockwell in 1966. In 1985, Textron Automotive Company purchased North American Rockwell, and subsequently sold the facility to Grenada Manufacturing in 1999. The facility is bounded to the north and east by lines of the Central Gulf Railroad, to the west by Highway 332, and to the south by undeveloped wetlands/rural areas. Riverdale Creek runs along the northwest quadrant of the facility's property, and empties into the Yalobusha River, approximately one mile downstream.

Grenada Manufacturing manufactures several products including wheel covers, thermos cups, vehicle air bag door, and window glides. The activities associated with these products include parts stamping, rolling, washing, polishing, electroplating, and painting.

The facility is registered with MDEQ as a large quantity generator of hazardous waste. Currently, the hazardous waste being generated comes from two main areas. The electroplating operation generates rinsate waters and tank bottoms that meets D007 listing. Cleaning procedures in the painting operations generate waste toluene, a listed hazardous waste (D001/F005).

9) Findings

On July 17, 2000, inspectors from MDEQ and EPA met with the facility representative, presented their credentials, and briefed them on the formalities of the inspection and the type of activities it would cover. The RCRA CEI consisted of a facility tour and records review. Records reviewed included the hazardous waste manifests, inspection logs, biennial report, land disposal notification forms, personnel training records, waste storage inspection sheets, and the facility contingency plan.

Mr. Don Williams accompanied inspectors on a tour of the facility, including the satellite accumulation area, the hazardous waste storage area, the closed surface impoundment area, and the on-site wastewater treatment facility.

Rinsate waters are presently recycled. Any overflow/spillage of water from the process areas are cycled to a large concrete in-ground tank called the "destruct pit". Total capacity of the tank is 17,000 gallons. When sufficient amount is collected rinsate water is pumped to a recovery unit inside the plant which distills the water and concentrates the chrome. Any recovered chrome is returned to chrome tanks, and back into the electroplating process.

The satellite accumulation area is located in the back of the facility, inside a small paint mix room, near the paint operation. The area contained three drums: one drum of waste toluene (D001/F005), one drum of waste paint filters (D007), and one drum of waste paint rags (F005). Each drum was properly marked and closed.

During the inspection, a 55-gallon blue drum of chromic acid, near the painting area, was leaking on the concrete floor. This is a violation of 40 CFR § 265.31 which states that facilities must be maintained and operated to minimize the possibility of any unplanned release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. This leak was corrected during the inspection.

The facility's 90-day storage area is bermed, roofed, fenced and locked, and warning signs are clearly visible. At the time of this inspection a total of three 55-gallon drums of hazardous waste were stored in the storage area. These drums were dated and marked but had exceeded the 90 day limit. The drum dated December 15, 1999, contained dissolve trichloroethylene purge water, the drum dated March 17, 2000, contained chlorinated solvents purge water; and the drum dated March 17, 2000, contained trichloroethylene soil cuttings. These three drums came from Moose Lodge Road Disposal Area. Meritor Corporation, the Potentially Responsible Party, is cleaning up this site with guidance from the Mississippi Department of Environmental Quality (MDEQ) -Uncontrolled Site Section. According to John Bozick of Meritor Corporation, it was necessary to run laboratory analysis of these three drum's Investigation Derived Waste (IDW) and send analysis to a disposal company for approval prior to disposal (see attached letter dated September 29, 2000 from Meritor Corporation). The three 55-gallon drums were shipped to Environmental Enterprises of Cincinnati, Ohio on July 24, 2000. EPA recommends that in future Merritor notify MDEQ - Uncontrolled Site Section about storing off-site wastes at the Grenada Manufacturing's storage area.

A visual inspection of the closed surface impoundments and associated ground water monitoring wells was conducted. The final cap was in good condition with no apparent evidence of erosion or subsidence. Warning signs were visible from all angles of approach. The ground water monitoring well appeared to be in good condition and each well cap was labeled and locked.

File and Record Review:

Manifests - At the time of the inspection, Hazardous Waste Manifests and Land Disposal Restricted documents for 1998 through 2000 were reviewed. Two waste manifests (# 896143 and # 902295) were found not signed by the designated disposal facility during the inspection. However, signed copies were provided after the inspection.

Inspection Records - The facility conducted daily hazardous waste inspections at the storage area. These records were reviewed and found to be adequate.

Personnel Training Records - The facility had records of personnel hazardous waste management procedure training for calendar year 1998, 1999, and 2000. No RCRA deficiencies were noted with the personnel training records.

Contingency Plan - The Contingency Plan was reviewed during the inspection. The plan was adequate and no RCRA deficiencies were noted with the contingency plan.

Reports - Biennial reports of 1999, and hazardous waste reduction plan were reviewed during the inspection. No violations were observed.

Out Briefing:

The facility was informed of the inspector's conclusions of the CEI, including regulatory concern and the leaking chromic acid drum.

10) Signed

	Par	NEZ A	4.1	Mallic	2/
Par	vez A	4. Mal	lick		7
Env	zironi	mental	Enc	ineer	

10-12-00 Date

11) Concurrence/Approval

1

Jeffrey 7. Pallas, Chief

South RCRA Enforcement and Compliance Section

RCRA Enforcement and Compliance Branch

COMPLIANCE EVALUATION INSPECTION TEXTRON AUTOMOTIVE COMPANY GRENADA, MISSISSIPPI

1. Inspector and Author of Report

D. Scott Mills, Environmental EIT
Mississippi Department of Environmental Quality
Office of Pollution Control
Jackson, Mississippi 39289

2. Facility Information

Textron Automotive Company (a.k.a. Randall-Textron) 635 Highway 332
Grenada, Mississippi 38901
MSD 007 037 278

3. Responsible Company Official

Wayne Taylor, General Manager

4. Inspection Participants

D. Scott Mills, MDEQ
Don Williams, Textron Automotive Company

5. Date and Time of Inspection

February 24, 1999 @ 9:00 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 264, and 268.

7. Purpose of Inspection

To perform a Compliance Evaluation Inspection (CEI) to determine Textron Automotive's compliance status with the applicable regulations and the RCRA Post-Closure Permit.

13:07

8. Facility Description

Textron Automotive Company, formerly known as Randall-Textron, is located off Highway 332 on the north side of Grenada, Mississippi, in the industrial park. Textron Automotive Company was originally built in 1960 by Lyons, Incorporated and sold to North American Rockwell in 1966. In 1985, Textron Automotive Company purchased the facility. The facility is bounded to the north and east by lines of the Central Gulf Railroad, to the west by Highway 332, and to the south by undeveloped wetlands/rural areas. Riverdale Creek runs along the northwest edge of the facility's property line and empties into the Yalobusha River approximately one mile downstream.

Textron Automotive Company manufactures several products including wheel covers, thermos cups, and window glides. The activities associated with these products include processes such as stamping, rolling, washing, polishing, electroplating, and painting.

Currently, the hazardous waste being generated comes from two main areas. The painting operation, through cleaning procedures, generates waste toluene (D001/F005) and the electroplating operation generates rinsate waters and tank bottoms that meet the D007 listing.

9. Findings

The inspection began with a review of the facility records. The records inspected included the waste manifests, inspection logs, contingency plan, training records, and a copy of the RCRA Post-Closure Permit. All records inspected were found in order and up to date. The contingency plan (SPCC) was last revised in October 0f 1998.

After reviewing the records, Mr. Williams accompanied me on a tour of the facility, including the satellite accumulation area, the less-than-one hundred eighty day storage area, the closed surface impoundment, and the on-site wastewater treatment facility. The satellite accumulation area is located in the back of the facility, inside a small paint mix room, near the paint operation. The area contained three (3) drums: one of waste toluene (D001/F005), one drum of waste paint filters (D007), and one drum of waste paint rags (F005). Each drum was properly labeled and closed. The drums were noted as 50, 25, and 25 percent full, respectively. The less-than-one hundred eighty day storage area is bermed, roofed, fenced and locked, and warning signs are clearly visible. At the time of this inspection, one drum of flourescent light bulbs was stored in the area. The drum were in good condition, closed, and properly labeled as Flourescent Light Bulbs (D009).

Next, a visual inspection of the closed surface impoundment and associated ground water monitoring wells was conducted. The final cap of the unit was in good condition with no apparent evidence of erosion or subsidence. The North side of the cap, identified in the previous inspection as needing grounds-work, had been cut back to allow the area and well heads to be easily inspected. Warning signs were visible from all angles of approach. The

P. 04

ground water monitoring wells appeared to be in good condition and each well cap was labeled (i.e. MW#1) and locked with new locks.

10. Conclusion

No apparent violations of the applicable regulations were found on the day of inspection. As a follow-up from previous inspection, the following was noted:

- A. The drum of waste toluene identified in the previous inspection was shipped off for disposal on October 6, 1998.
- B. The labeling of the wells and installation of operable locks was performed as recommended by the previous inspection.
- C. The contingency plan (SPCC) was updated in October 1998.
- D. The closed surface impoundment final cap showed signs of regular grounds-keeping and cover maintenance.
- E. Textron has taken the necessary steps to insure that the required inspections of closed surface impoundment are being conducted properly, and that any problems identified during these inspections are documented in the log.

11. Signed

D. Scott Mills

Chemical, Agricultural, and Metal Manufacturing Branch Environmental Compliance and Enforcement Division

12. Approved

Earl Mahaffey, Chief

Chemical, Agricultural, and Metal Manufacturing Branch Environmental Compliance and Enforcement Division

Meritor Automotive, Inc. 2135 W. Maple Road Troy, MI 48084-7186

248-435-2705 248-435-8205 - Fax





Brad Kennedy Environmental Compliance and Enforcement Division Office of Pollution Con rol P.O. Box 10385 Jackson, MS 39 89-03 5

Re: State/EPA RCRA inspection, Greenda Manufacturing, Grenalia Mississi pi

Dear Mr. Kennedy,

In response to the department's letters dated September 1 and 15 2000, Ar nMe for submits the following information to address the questions which you raised.

- The three drums in questic a were generated from the Yloose I odge Road Disposal Area which is currently under the state of Mississippi's Uncontrolled Sites Banch Voluntary Clean-up rogram. We have been working with Tony Russel for a number of years to a dress the clean-up of this site. The site was discovered in 1993 and numerous remed al investigation reports he e been filed with the Uncontrolled Sites Branch regarding the site.
- The procedures ArvinMer or use in managing Investigation Derive I Wastes (I W) follow EPA's guidelines and were submitted as part of the workplan for investigating the sit. A copy of the appropriate sections of the most recent State-approved workplan is attached. At inMeritor do not have broad policy we follow for all sites, as each site is unique and may require special handling of ID depending on the type of contaminant.
- The Moose Lodge Road D sposal Area does not have an EPA ID no her as it is not an active manufacturing site and is not owned by A vinMeritor. Therefore, we use the ID number for the former Rockwell facility. The former Rockwell facility has a secure storage area which is more suited for storage waste materials than the vacated Moose Lodge Roal property.
- Some of the waste in question was generated during a remedial investigation of the area. The investigation commencedi in December 1999, with additional sampling in March 2000. It was necessary to run laboratory analysis on the IDW and send the malysis to a disposal company for approval prior to disposal, thus the delay in disposal.
- The drums were manifested (copy attached) and sent in Environmental Enterprises in Cincinnati, OH for disposal.

9:30

September 29, 2000 Page 2

- Two drums contained contaminated ground water generated from monitoring well development, and the
 remaining drum contained soil cuttings from soil boring installations. The two groundwater drums were
 shipped as hazardous wastes; the soil was shipped as non-hazardous waste.
- The transporter of the waste was Midwest Environmental Transport of Cincinnati, Ohio. Their EPA ID Number is: OH0000000539. The Disposal company used for disposal of the waste was Environmental Enterprises of Cincinnati, Ohio (EPA ID No. OHD083377010).

It should be noted that the disposal company we use is more than 200 miles away from the site; therefore, an additional 90 days is allowed for storage of the waste materials.

I hope this answers your questions. Feel free to contact mo if you have a more. ArvinMeritor will do its best to ensure that in the future IDW is removed off-site in a more timely fashion.

John Bozick

Cc: Tony Russell

DEQ POLLUTION CTRL Fax:601-961-5390	1	Oct 10	' 00	9:30	P. 04
MB64 Emergency Contact Telep	phone Numb	er 📕			
1. Generator's US EPA ID No.	Man Docum	iflest 2.	Page 1	Information	in the shaded areas is
WASTE MANIFEST HSD 9 8 7 9 3 7 2	7 8 9 F	m di t	of State Ma	Heat Docume	by Federal law.
Generator's Name and Mailing Address Heritor Corporation			1	100	Ar all
Heritor Corporation 635 Highway 332 Sammadahon#6 38901	*	#	1 8	प्रे निर्देश	en far wert to the second
. Transporter 1 Company Name	A ID Number	g . d D.	Trumpol	nspakers ID pris Phone.	543-772-1145
Hidwest Envir. Transport, Inc. 8. US E. Transporter 2 Company Name	PA ID Number	E		ra Phone	<u> </u>
Designated Facility Name and Site Address 10. US El	PA ID Number				
Environmental Enterprises 4659 Spring Grove Avenue	3 3 7 7	N.			
Cincinnati, Ohio 45232 O H D 0 8 1. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	33 / 1	12, Contains		13. Total	14. (************************************
HM Weste trichloroethylene: 6.1: UN1718, PG II	CT:	No T	(He)	Quantity	WWVol Was No.
Weste trichloroethylene; 6.1; UN1710, PG II (F002)		2,	0.	2,0.5.3	- G
Mon-Hazardous, Non-Regulated Waste Soil Aug	ger .				i sing of
Cuttings			DN :	5.5	G IONE
* HE					15 - 10 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
					1 11 12
	W. 6. 2.		37 J	i Meen	
15. Special Handling Instructions and Additional Information	4			تباقي أورط	
EMERGENCY CONTACT: Gary Davis (513)541-1823 o	r (190)39	2-1 73		1	
AND CONTACT 911 16. GENERATOR'S GERTIFICATION: I hereby decises that the contents of this consignment	are N y and ac	urately loacrib	ed above	proper ship	ping name and are classified
packed, marked, and labeled, and are in all respects in proper condition for transport by night	vay az Projek c	WARTS MOTE	adito the c	grea I have d	intermined to be ocurromical
practicable and that I have selected the precisable method of treatment, storage, or corpose and the environment; OR, if I am a small quantity generator, I have made a good faith effort					
Printed/Typed Name John Aoo: 1	an	M			Month Day 10-
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name Charles Woodnum Signature Charles Woodnum	- AND 101	waln	h		Month Day 102
un u			1		Month Day Yes
Post-it Fax Note 7671 Date 9/25/00 pages Fraim Don Williams			1		1.1.1.
Co. Dept. Co. Grenula Mg					
Phone # 66 2 226-1/6 /	Ship ra life at a se	ant as saturi t	n leem 10	* *	* *
748 735 - 8205 1	this munifest exc	opr as noted i	ringin ist.	1,	Mark Park
Promiter types from the Signature	· /h	U	1	4	107 3.6 D
ORIGINAL - RETURN TO	O GE JERAT	OR I			
					TOTAL P.01

Dissolved Trichloroethylene (TCE) Telineation Workplan Moose Lodg Road Disposal Area Grenada, Mississippi October 14, 1998 Page 10

be collected from selected piezometers to be analyzed by in off-site laboratory for the full Method 8260 analyte list. The duplicate samples will also serve as a quality assurance cleck of the on-site data.

Fax:601-961-5390

Rationale for Selecting Additional Sample Locations

On-site analytical results will be evaluated as they are eccived (in the field) to determine the placement of additional piezometers. Based on the initial sampling results, additional sampling points will be installed, if required, to identify the limit of the plume and to letermine VOC concentrations within the plume. On-site VOC analyses will be performed to determine if additional piezometers need to be installed/sampled to complete the plume delineation process. In general, piezometers will be installed and sampled at progressive r larger distances from areas of known VOC impact until the extent of the plume has been determined. The objective of his strategy will be to bracket the area of impact with piezometers.

3.2 GEOPROBE PROCEDURES / PIEZOMETER INSTALLATION

The piezometer installation/sampling area is heavily vege ated; therefore, in lie of a drill rig, a smaller, more mobile GeoProbe mounted to an all-terr in vehicle (ATV) will be used. The piezometers will be installed to a depth of approximately 17 feet and constructed to obtain groundwater samples from the seven (7) to 17 foot depth. The GeoProbe operate by advancing a string of l-inch-diameter threaded steel alloy rods with the and of an ATV-mounted hydraulic ram. The GeoProbe is capable of exerting 16,000 pounds of force and uses a hy raulic hammer attachment to advance the rods through dense or hard materials.

Dissolve I Trichloroethylene (T. CE) Delineation Workplan
Moose Lodge Road Disposal Area
Grenada, Mississippi
October 14, 1998
Page 11

The GeoProbe borings will be advanced into the uppermost saturated zone and small diameter piezometers will be installed. The piezometers will be constructed of 1-in th-diameter PVC with approximately 10 feet of 0.010-slot well screen set at a depth of approximately 17 feet. The piezometers will be installed using standard small-diameter well installation techniques. Previous investigations indicate that the soil is of sufficient integrity to allow for installation of small-diameter piezometers through the open bore hole. The use of casings or other devices to maintain the bore hole during piezometer installation is currently not anticipated

A Macro-Core sampler will be used to advance the soil berings and obtain so isamples at depth. The Macro-Core sampler is a hollow steel tube measuring 4 feet in length and 2 inches in outside diameter. The core tube is fitted with an acetate insert and is capable of recovering a soil core up to 48 inches long and 1.5 inches in diameter.

Sampling procedures to be implemented during the screening investigation are discussed below.

GeoProbe Sampling Protocol:

- The ATV-mounted GeoProbe will be moved to the design ted sampling location.

 Any deviation from the sample locations identify d in the Work Plan and reasons for changes of location will be documented in the field log book.
- The decontaminated Macro sampler will be advanced from the ground surface to a depth of 4 feet using the hydraulic ram and ha amer. Afte being advanced to the sampling depth, the macro-core will be with rawn and the soil sample that is contained within the acetate liner will be removed for inspection.
- The acctate liner will be placed on clean plastic sheeting and then cut open using a decontaminated utility knife for direct observation of the soil sample.

THE PERSON NAMED OF PERSONS ASSESSED.

Dissolved Trichloroethylene (TCE) Delineation Workplan Moose I. dge Road Disposal Area Grenada, Mississippi October 14, 1998 Page 12

- 4) The soil core will then be characterized by visual examination; stratigraphic information and measurements will be recorded in the log book.
- 5) If the hole remains open after the sampler is removed, the Macro-Core sampler can be used at greater depths to collect continuous soil samples by following the previously outlined procedures.

soils and decontamination liquids generated during GeoF obe activities will be placed in labeled containers (e.g., 55-gallon drums) for appropriate characterization and disposal (as necessary). Small-diameter piezometers will be installed in the open fore holes to facilitate the collection of groundwater samples. The following procedures will be used for construction of the small-diameter piezometers.

- 1) The boring will be terminated at a depth of 77 feet or at the bottom of the uppermost aquifer and all sampling equipment will be withdrawn from the bore hole.
- The piezometer casing will be installed in the open bore-hole. The piezometer casing will consist of 10 feet of 1-inch-diameter slotted PVC screen (0.010 slot) flush-threaded to 1-inch-diameter PVC riser. On y new well screen and riser will be used.
- Number four (4) filter pack sand will be installed in the annulus of the boring from the bottom of the boring to approximately two (2) feet above the screened interval. Thoroughly decontaminated small-diame er probing rods will be lowered into the annular space to gauge the depth to which the filter pack is installed.
- 4) The remaining annular space will be filled with granular bentonite and hydrated with clean, potable water.
- The piezometers will be finished with a proximately 18 inches of stickup, and a small concrete pad will be poured at the surface to secure the piezometer. The piezometers will be capped with either screw-on flush-threaded caps or expandable caps.

9:33

Dissolved Trich oroethylene (TCE) Delineation Workplan
Moose Lodge Road Disposal Area
Grenada, Mississippi
October 14, 1998
Page 13

3.3 GROUNDWATER SAMPLING

3.3.1 Piezometer Sampling

Following completion of the piezometer installation (or for existing piezometers, prior to sampling), piezometers will be developed (purged) to improve their hydraulic connection with the water bearing zone. Evacuation will be conducted using a peristaltic pump. The peristaltic pump uses mechanical peristalsis to retrieve the groundwater from the piezometer casing via polyethylene tubing lowered into the casing. Flexible silicon tubing will be used to convey groundwater through the pumping station itself. The polyethylene tubing lowered into the piezometer casing will be inserted into this silicon tubing. Each piezometer will have dedicated polyethylene and silicon tubing for both purging and sampling.

To ensure that stagnant water does not mix with fresh formation water during sample collection, the tubing for the peristaltic pump will be positioned inside the piezometer casing as high as possible near the top of the water column. As the water level within the piezometer casing may fluctuate during the purging and sampling, the tubing will be adjusted as necessary to maintain its relative position near the top of the water column.

Groundwater purging will be conducted using the following procedures:

- 1. Lower the dedicated polyethylene tubing below the water level in the piezometer casing.
- Secure the free end of the groundwater discharge tubing to discharge into a graduated container.

9:33

- 3. Turn the peristaltic pump on and verify that the direction switch on the pump is in the proper position to pump groundwater out of the piezometer.
- 4. Adjust the speed control dial as necessary to pump the groundwater from the piezometer casing.
- If possible, purge/evacuate each piezometer until five casing volumes of groundwater have been extracted.
- 6. Measure the total volume of groundwater extracted during the purging procedures using a graduated container. When full, empty the container and refill again (as necessary).

· One casing volume, in gallons, will be calculated using the following formula:

No. of gallons = $\pi r^2 h \times 7.48$ (gallons/ $\hat{\pi}^3$)

Where r = inside radius of piezometer casing (feet)
h = height of water column in piezometer (feet)

For a 1-inch inside diameter piezometer:

No. of gallons = 0.04 h

For a 1-inch piezometer, the number of gallons equal to five casing volumes would be:

No. of gallons = 0.20 h

Dissolved Trichloroethylene (TCE) Delineation Workplan
Moose Lodge Road Disposal Area
Grenada, Mississippi
October 14, 1998
Page 15

All groundwater samples will be collected within 2 hours of purging or, when a piezometer is purged to dryness, as soon as possible.

Due to the small diameter of the piezometers, the piezometers will be purged using a peristaltic pump and groundwater samples will be collected with a stainless steel bailer. The piezometer will be sampled within two (2) hours after purging. The sample will be collected by bailing water from the piezometer and immediately, but slowly pouring the sample into the vials provided by the laboratory. The sample will be placed into the container such that there is no headspace or bubble in the vial after closing the vial. The container will be placed immediately in a cooler that is packed with ice. The cooler will contain enough ice to maintain sample temperature at less than or equal to 4°C. The cooler will be transported to a mobile laboratory located on-site and, if duplicated, transported by overnight carrier to the designated off-site h boratory. Sample handling and chain-of-custody procedures are addressed in Section 3.4.

The water level indicator and the stainless steel bailer will be decontaminated between each use by washing with clean potable water and a laboratory grade detergent, Alconox, and then tripled rinsed with deionized water. The waste water will be placed into a suitable container until properly disposed.

3.3.2 Monitoring Well Sampling

Commence of the artificial and a second of the commence of the

Monitoring well sampling procedures will be consistent with previous characterizations at the site.

The personnel performing sampling will wear new, clean surgical gloves while performing sampling activities. The depth to the top of the water column in the well and the depth to the bottom of the well will be measured using a water level indicator. The water level indicator will be

Dissolved Trichloroethylene (TCE) Delingation Workplan
Moose Lodge Road Disposal Azea
Grenada, Mississippi
October 14, 1998
Page 16

decontaminated prior to each use. The total volume of the column in the well will be calculated based on well construction information (i.e., well diameter).

Prior to sampling, the well will be purged to remove standing water and obtain a representative groundwater sample. Purging consists of removing at least three times the water column volume in the well using a stainless steel bailer and a new polypropylene rope. If the well is dewatered prior to removing three well volumes, the well will be allowed to sit until a sufficient amount of water is present to obtain a sample. The purged water will be placed into a suitable container for disposal.

The well will be sampled immediately after purging using the same bailer and rope that were used during purging. The sample will be collected by bailing water from the well and immediately, but slowly pouring the sample into the vials provided by the laboratory. The sample will be placed into the container such that there is no headspace or bubble in the vial after closing the vial. The container will be placed immediately in a cooler that is packed with ice. The ice will be placed in sealable-type plastic bags. The cooler will contain enough ice to maintain sample temperature at less than or equal to 4°C. The cooler will be transported by overnight carrier to the designated off-site laboratory. Sample handling and chain-of-custody procedures are addressed in Section 3.4.

The water level indicator and the stainless steel bailer will be decontaminated between each use by washing with clean potable water and a laboratory grade detergent, Alconox, and then tripled rinsed with deionized water. The waste water will be placed into a suitable container until properly disposed.



Mississippi Department of Environmental Quality Office of Pollution Control

Hazardous Waste Compliance Action Report

Site Name: Grenada Manufacturing LLC

CULDICAL ADDI	<u>(E99</u>	OTHER INFORMATION
LINE 1:	635 Highway 332	COUNTY: Grenada
LINE 2:		REGION: NRO
LINE 3:		SIC 1: 3465
MUNICIPALITY:	Grenada	HW TYPE: TSD
STATE CODE:	MS	BRANCH:
ZIP CODE:	38901-	Metal and Metal Fabricators Branch
MAILING ADDRE	SS	ECED CONTACT:
LINE 1:	635 Highway 332	Burchfield, David
LINE 2:	•	
LINE 3:		
MUNICIPALITY:	Grenada	
STATE CODE:	MS	
ZIP CODE:	38901-	
SCHEDULED DA	EACTIVITY: Compliance Evaluation E: 09/29/2000	on Inspection COMPLETED DATE: 07/17/2000
INVESTIGATOR:	Shelton, Kirk	SIGNIFICANT NON-COMPLIER
	MSD007037278	
C/ A ID NOMBER		HW PERMIT NUMBER:
COMMENTS:		
hazardous waste w	s were dated 3/17/00. The drum dated 12/15/9 as generated by Meritor Corporation/ 2135 we s in Greneda County known as the Moose Lor	a. The drums were labeled. One drum was dated 12/15/99, 9 was past the 180 day storage time. These drums of st Maple Road, Troy. MI 48084-7186. The waste was Ige Road site and Northend Site. These drums of hazardou
2) Two waste manifinspections.	est were found not signed during the inspection	n. However, signed copies were provided after the
3) Blue drum of Chi		
	omic Acid product was found leaking during th	e inspections. This leak corrected during the inspection.
Signature:	omic Acio product was found leaking during th	e inspections. This leak corrected during the inspection.
Signature:	omic Acic product was found leaking during th	e inspections. This leak corrected during the Inspection.

10:43



Mississippi Department of Environmental Quality Office of Pollution Control

TSD Facilities	
DCH - Chemical/Physical/Biological	DSI - Surface Impoundments
DCL - Closure/Post-Closure	DTR - Waste Tanks
DCF - Contingency Plan	DTT - Thermal Treatment
DFR - Financial Responsibility	DWP - Waste Pile
DGS - General Standards	CAS - C/A Compliance Schedule
DGW - Groundwater Monitoring	FRA - Former Enforcement Agreements
DIN - Incineration	CSS - Compliance Schedule Violation
DLF - Landfill	BRR - Differ Stds for Regulation of Residue
DLB - Land Ban	BPS - BIF Permit Standards
DLT - Land Treatment	BIS - BIF Interim Standards
DMC - Container Management	BCE - BIF Stds to Control Emissions
DMR - Manifest	BDT - BIF Stds to Direct Transfer
DOR - Other Requirements	DIA - Incinerator Waste Analysis
DOT - Other Requirements (Oversight)	DPS - Incinerator Performance Standards
DPB - Part B Permit Application	DOP - Incinerator Operating Requirements
DPP - Preparedness Prevention	DMI - Incinerator Monitoring and Inspection
	•
Generator Facilities	
GER - All Requirements (Oversight)	GPT - Pre-Trensport
GGR - General Requirements	GRR - kecordkeeping
GMR - Manifest	GSC - Special Conditions
GLB - Land Ban	GSQ - SQG Requirements
GOR - Waste Min. Program, Annual/Biennua	- Waster
Transporters	
TGR - General Standards	TWD - HW Discharges
TMR - Manifest	TRR - All Requirements
TOR - Other Requirements	



Mississippi Department of Environmental Quality Office of Pollution Control

ON A GEN 2 PROTECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960
APR

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

4WD-RPB

Mr. Don Williams, Plant Environmental Coordinator Grenada Manufacturing, LLC 635 Highway 332 Grenada, Mississippi 38901

Subject: Review of Summary of Investigative Work

Notice of Technical Inadequacy Imposition of Interim Measures

Randall Textron Facility, Grenada, Mississippi

EPA ID No. MSD 007 037 278

Dear Mr. Williams;

As you are aware, the HSWA Permit for your facility was issued July 7, 1998, to address the environmental investigation, reporting requirements, and/or confirmatory sampling for 8 solid waste management units (SWMUs) and 3 areas of concern (AOCs). The U.S. Environmental Protection Agency (EPA) issued a combined RFI/Confirmatory Sampling (CS) Work Plan call letter on March 2, 1999. The RFI/CS Work Plan was called to require information and investigation at specific SWMUs and AOCs.

On July 25, 1999, the facility submitted a Summary of Investigative Work (SOIW) conducted at the facility. As a result of discussions between EPA and the facility, it was decided that the SOIW could be submitted to document the investigative and remedial work that had already been conducted under the facility's RCRA Base Permit. The EPA recently completed its review of the SOIW. EPA is prepared to accept this document in lieu of a draft RFI Report. EPA's comments on the SOIW are enclosed. After addressing EPA's comments, the revised version of this document should be titled RFI Report.

The SOIW documents that there is groundwater and soil contamination at several SWMUs and that the groundwater contamination is facility-wide due to comingling of plumes from regulated units and SWMUs. EPA would like to propose that the facility address the groundwater contamination on a 'whole facility basis' in the future, rather than on a SWMU by SWMU basis. Source removal and soil contamination must still be addressed on a SWMU by SWMU basis for all SWMUs and AOCs listed on Table G.1 and G.3 in the facility's permit.

EPA would like the facility to begin corrective action as soon as possible at the highest priority SWMUs and AOCs requiring further action as listed in the facility's HSWA permit and/or shown by the SOIW to require further action. To this end, EPA is requiring that an Interim Measures (IM)Workplan for SWMUs 12, 14, 15 and AOCs A and B be generated within 30 days of receipt of this letter. The IM Workplan should address source removal including closure of the Chromium Destruct Pit and facility-wide groundwater contamination as it relates to the SWMUs under interim measures for all remaining SWMUs requiring further corrective action. The proposed Interim Measures should augment or support the facility's contemplated final remedy. Please note that until the IM Workplan is submitted on or before the due date, you have not fulfilled the requirements of your HSWA permit. Continued noncompliance may result in a formal enforcement action pursuant to Section 3008 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6920, under which EPA may seek the imposition of penalties up to \$27,500 for each day of noncompliance.

A meeting is being scheduled in April for EPA's facility manager to tour the facility, discuss comments on the Draft RFI Report, Interim Measures, and future steps with respect to the HSWA corrective action process. Meanwhile, should you have any questions or concerns, please contact Mr. Don Webster at (404) 562-8469.

Sincerely,

Narindar M. Kumar, Chief RCRA Programs Branch Waste Management Division

Enclosure

cc: Louis Crawford, MDEQ
John Devic, Textron Automotive
John Bozick, Meritor Automotive

Summary of Investigative Work, (SOIW) Randall Textron Facility, Grenada, Mississippi: EPA Comments

General

- 1. The SOIW documents that there is groundwater and soil contamination at several SWMUs and that the groundwater contamination is facility-wide. EPA would like to propose that the facility address groundwater contamination on a 'whole facility basis' in the future, rather than on a SWMU by SWMU basis. Source removal and soil contamination must still be addressed on a SWMU by SWMU basis for all SWMUs and AOCs listed on Table G.1 and G.3 in the facility's permit.
- 2. EPA would like the facility to begin corrective action as soon as possible at the highest priority SWMUs and AOCs requiring further action in the facility's HSWA permit and/or shown by the SOIW to require further action. To this end, EPA is requiring that an Interim Measures (IM)Workplan for SWMUSs 12, 14, 15 and AOCs A and B be generated within 30 days of receipt of this letter. The IM Workplan should address source removal, closure of the Chromium Destruct Pit and facility-wide groundwater contamination.

Specific

- 1. Concentrations of contaminants in Tables 2-1 through 2-7 and in Section 3.0, Data Summaries for SWMUs and AOCs, should list the appropriate maximum allowable exposure level for each contaminant, such as EPA Region 3 Risk-Based Concentrations (RBCs) for soil and air; Office of Water, Maximum Contaminant Levels (MCLs) for ground and drinking water; and any appropriate surface water quality or sediment screening standards. Detected values should then be compared to the appropriate target cleanup levels in the same measurement units as the standard. For example, MCLs for groundwater are reported in mg/l and risk based concentrations for soil and sediment are reported in mg/kg. The SOIW reports organics in ug/l and metals variously as mg/l or ug/l. Please convert all measurements to a consistent standard format and resubmit revised pages for the final RFI report.
- 2. In order to make comparisons of corrective action effectiveness at various monitoring well locations, the facility should plot concentration versus time of key VOC and metal contamination constituents at each monitoring well. This will yield a graphic representation and show the effectiveness of remediation. This information should be included in future Groundwater Monitoring Reports.

3. The overlay figure provided should have the locations of all monitoring and recovery wells indicated more clearly. On the overlay provided, it is difficult to see the detail of the entire facility. The LNAPL, DNAPL and Chromium plumes should be marked in color. Please show the direction of surface water flow and groundwater flow on the figure.

SWMU Specific

- 1. SWMU 7- Outfall Ditch: At this SWMU, the reported levels of Chromium in the surface water exceeded the National Recommended Water Quality Criteria. TCE exceeded the recommended levels for human consumption by an order of magnitude or more. Is a warning against human consumption posted at Riverdale Creek? However, sediment samples did not exceed RBCs for total Chromium and an ecological screening level for TCE in sediment has not been calculated. EPA is concerned about the continued release of TCE and Chromium in the effluent from the waste water treatment facility, and will inquire at the MDEQ Water Branch what effect these exceedences of the National Recommended Water Standards may have on compliance with the facility's NPDES permit. EPA cannot grant no further action status for this SWMU at this time, but does not require this SWMU to be included in Interim Measures.
- 2. SWMU 12- Wet Well Sump: The reported TCE concentrations exceed both MCLs and Risk Based Cleanup action levels in the groundwater, at monitoring well RT-2, closest to the Wet Well. Because of the lack of soil data at this SWMU, confirmatory soil samples must be taken. Soil samples should be taken at 2 foot intervals from ground surface to below this unit. Based on EPA's technical review of the SOIW, this SWMU cannot be granted No Further Action status. This SWMU must be included in the Interim Measures Workplan for remediation of groundwater contamination and possible source removal, pending the results of soil sampling.
- 3. SWMU 14- Chromium Destruct Pit: Reported groundwater levels of Chromium and TCE exceed MCLs. The SOWI does not indicate that any soil samples were taken below the unit. Soil samples should be taken at depths greater than ten feet around and below this unit so that a judgement can be made regarding the extent of source removal. This SWMU must be included in the Interim Measures Workplan for remediation of groundwater contamination and removal of contaminated soils.
- 4. SWMU 14- Chromium Destruct Pit and SWMU 15- Process Sewers: These SWMUs have released listed hazardous wastes (F006) and hazardous constituents (TCE, DCE, Cr, As) to the groundwater and soil. Both the Chromium Destruct Pit, and the Process Sewers have been in use since 1961. Both units have a history of systematic and continuing releases of listed wastes subject to the Land Disposal Restrictions of RCRA and could be

considered to be Regulated Units if so desired by the MDEQ. They must be closed under appropriate closure requirements in Part 264 Subparts J through L. The Interim Measures Plan for these units must include provisions for alternatives to these units, temporary closure of these units, and investigation into the extent of source removal necessary to eleminate releases from these units.

- 5. SWMU 15- Process Sewers: The SOIW confirms the presence of TCE and Chromium in the groundwater at this SWMU. The Process Sewers provide a pathway for release of groundwater contaminants into the ambient air of the Main Plant Building. Because the process sewers under the Main Plant Building are contaminated from past activities, any cleanup plan should consider the utility of soil vapor extraction of groundwater and soil contaminants or some similar technology for long term cleanup of the air and groundwater. SWMU 15 must be included in the Interim Measures Workplan for remediation of groundwater contamination and possible remediation of air.
- 6. SWMU 15- Process Sewers: The sewer line that runs from the Destruct Pit to the Wet Well has been closed. EPA recommends that all portions of the process sewers no longer in use be filled with concrete to prevent their inadvertent or accidental use. EPA recommends that all hazardous waste containing materials piped in the plant be piped above ground so that piping can be easily inspected. As part of Interim Measures, the Process Sewers still in operation carrying hazardous waste or hazardous constituents must be integrity tested and repaired as soon as practicable if a release is found. EPA considers the process sewers to be a potential source of continuing releases.
- 7. EPA requires that as part of the Interim Measures Workplan, indoor air be tested for VOCs, at a minimum; TCE, 1,2-DCE, Benzene, Ethylbenzene, Xylene, and Toluene, in areas of the main plant where the Process Sewers are still operational. If levels of indoor air contaminants are found to be above Risk-based limits, EPA recommends that the facility take appropriate steps to immediately reduce air contamination, comply with OSHA regulations, and to inform employees. Air releases are considered SWMUs by EPA and are subject to HSWA Corrective Action. Indoor air testing must be included in the Interim Measures Workplan.
- 8. AOC A- Former Trichloroethylene Storage Area: As reported in the SOIW, groundwater and soil contain high levels of PCE, TCE, 1,2-DCE exceeding MCLs. This contamination resulted from the release of 10,000 to 12,000 gallons of TCE in the early 1980's. About 570 gallons of of TCE has been recovered from this release using recovery wells located in the vicinity of the release, however, interim remediation activities at this AOC, and AOC B have been suspended as stated in the SOIW. It is EPA's opinion that corrective action to date has not been effective in recovering most of the DNAPL from the release.

High subsurface concentrations of these contaminants are known to exist downgradient of this AOC (Figure 5-47 in SOWI). Table 2-2 in the SOWI demonstrates that TCE concentrations in monitoring wells did not decrease substantially between 1993 and 1998. An Interim Measures Workplan must must be developed to continue remediation of this release. Ultimately, a facility-wide groundwater corrective action program must be developed and implemented to effectively remediate the releases from this and all AOCs and SWMUs. If source removal of contaminated soils, restarting the recovery wells, drilling of new recovery wells or any measure would be effective in remediation of the TCE release, such an approach must be included in the Interim Measures Workplan. Whatever Interim Measures are selected must compliment the facility's final corrective action plan.

- 9. AOC B- Former Toluene Underground Storage Area: As reported in the SOIW, Groundwater contains high levels of toluene, TCE, 1,2-DCE, ethylbenzene and xylene exceeding MCLs. Corrective action to date has been effective in recovering a significant amount of LNAPL from the release, however, known pockets of this contamination continue to exist (Figure 5-54 in SOIW). This AOC must be included in the Interim Measures Workplan and the facility-wide groundwater corrective action plan. The necessity of source removal of contaminated soils should be evaluated through confirmatory soil sampling before this AOC can be considered NFA.
- 10. AOC C, the Fuel Tank Farm Containment Area and SWMU 13, the Wastewater Treatment Plant require no further action at this time. If future evidence of significant spills or systematic or continuing releases becomes available, this status may change.

EPA would like the facility to begin corrective action as soon as possible at the highest priority SWMUs and AOCs requiring further action as listed in the facility's HSWA permit and/or shown by the SOIW to require further action. To this end, EPA is requiring that an Interim Measures (IM)Workplan for SWMUs 12, 14, 15 and AOCs A and B be generated within 30 days of receipt of this letter. The IM Workplan should address source removal including closure of the Chromium Destruct Pit and facility-wide groundwater contamination as it relates to the SWMUs under interim measures for all remaining SWMUs requiring further corrective action. The proposed Interim Measures should augment or support the facility's contemplated final remedy. Please note that until the IM Workplan is submitted on or before the due date, you have not fulfilled the requirements of your HSWA permit. Continued noncompliance may result in a formal enforcement action pursuant to Section 3008 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6920, under which EPA may seek the imposition of penalties up to \$27,500 for each day of noncompliance.

A meeting is being scheduled in April for EPA's facility manager to tour the facility, discuss comments on the Draft RFI Report, Interim Measures, and future steps with respect to the HSWA corrective action process. Meanwhile, should you have any questions or concerns, please contact Mr. Don Webster at (404) 562-8469.

Sincerely,

Narindar M. Kumar, Chief

RCRA Programs Branch Waste Management Division

Webster

Butler

Hardegree

Kumar

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

4WD-RPB

Mr. Don Williams, Plant Environmental Coordinator Grenada Manufacturing, LLC 635 Highway 332 Grenada, Mississippi 38901

Subject: Review of Summary of Investigative Work

Notice of Technical Inadequacy Imposition of Interim Measures Randall Textron Facility, Grenada, Mississippi

EPA ID No. MSD 007 037 278

Dear Mr. Williams;

As you are aware, the HSWA Permit for your facility was issued July 7, 1998, to address the environmental investigation, reporting requirements, and/or confirmatory sampling for 8 solid waste management units (SWMUs) and 3 areas of concern (AOCs). The U.S. Environmental Protection Agency (EPA) issued a combined RFI/Confirmatory Sampling (CS) Work Plan call letter on March 2, 1999. The RFI/CS Work Plan was called to require information and investigation at specific SWMUs and AOCs.

On July 25, 1999, the facility submitted a Summary of Investigative Work (SOIW) conducted at the facility. As a result of discussions between EPA and the facility, it was decided that the SOIW could be submitted to document the investigative and remedial work that had already been conducted under the facility's RCRA Base Permit. The EPA recently completed its review of the SOIW. EPA is prepared to accept this document in lieu of a draft RFI Report. EPA's comments on the SOIW are enclosed. After addressing EPA's comments, the revised version of this document should be titled RFI Report.

The SOIW documents that there is groundwater and soil contamination at several SWMUs and that the groundwater contamination is facility-wide due to comingling of plumes from regulated units and SWMUs. EPA would like to propose that the facility address the groundwater contamination on a 'whole facility basis' in the future, rather than on a SWMU by SWMU basis. Source removal and soil contamination must still be addressed on a SWMU by SWMU basis for all SWMUs and AOCs listed on Table G.1 and G.3 in the facility's permit.

addresses: Louis Crawford

MDEQ

P.O. Box 10385

Jackson, MS 39289

John Devic

Textron Automotive Co. Meritor Automotive

750 Stephenson Hwy. Troy, Michigan 48083

John Bozick

2135 West Maple Road Troy, Michigan 48084-7186



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

March 21, 2000

Mr. Don Williams, Plant Environmental Coordinator Grenada Manufacturing, LLC 635 Highway 332 Grenada, MS 38901

Dear Mr. Williams:

Re: Quarterly Groundwater Sampling Report & Annual

Statistical Evaluation Report, 3rd Quarter 1999 Grenada Manufacturing, LLC (MSD 007 037 278)

Grenada, Grenada County

Review has been completed of the referenced document (initially submitted November 10, 1999; replacement received March 16, 2000) and we have the following comments:

- 1. The last two sentences of the second paragraph in the cover letter appear to be contradictory. If the intent is to separate releases prior to and after closure, it is the source of the release that is of concern, not the timing of any release.
- 2. It is stated that the presence of TCE in the background well concludes that the source of the contaminant is not the impoundment. However, the low level (0.128 mg/l) of TCE in the background well compared to the levels detected in the downgradient wells (3.56 mg/l, 0.286 mg/l, and 22.5 mg/l) as well as the presence of TCE degradation products only in the downgradient wells indicates that the impoundment is a significant-if not the sole-contributor to groundwater contamination. While there may be other evidence to suggest a possible alternative source of the contamination, that conclusion cannot be drawn from the available information.

If you have any questions, please call me at 601-961-5117.

Sincerely,

Louis Crawford, P.E.

Environmental Permits Division

pc: Mr. Caleb Dana, Jr., P.E., Eco-Systems, Inc.

Ms. Lael Butler, U.S. EPA Region 4 THIS COPY FOR

d18/textron/gw3-99-1